

#### **MISSION**

The mission of the Department of Natural Resources and Environmental Control (DNREC) is to ensure the wise management, conservation, and enhancement of the state's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life, and educate the public on historic, cultural, and natural resource use, requirements, and issues.

#### **KEY OBJECTIVES**

- Promote health and safety by maintaining and improving the quality of air, land, and water resources, manage populations of mosquitoes and other pests, and clean up spills involving hazardous chemicals to enhance the health and well-being of Delaware's people, wildlife, and plants.
- Conserve plant and animal resources through protection and management of species populations and their habitats. This effort involves maintenance of biodiversity, harvest allocation of species populations, protection and restoration of ecological functions and processes, and performance of educational outreach. Achieving this objective necessitates good quality air, water and soils. Sustaining this objective requires

coordination of the department to fulfill Livable Delaware goals.

- Promote and provide recreational opportunities that allow Delawareans to enjoy natural resources and open spaces that enhance quality of life and result in a more Livable Delaware. The department strives to provide recreational opportunities while balancing resource protection with resource management and
- Broaden the commitment to environmental protection and resource conservation by working in partnership with others to develop strategies that integrate economic development, environmental quality, and social policy making with broad public involvement.

#### **PRIORITIES**

Improve Industrial Compliance and Environmental Performance - The challenge over the next year and beyond is to respond to the need for greater environmental stewardship with both aggressive enforcement for the violators and rewards for compliance. There also needs to be compliance effort incentives to attract and inspire movement toward environmental stewardship and environmental excellence for all of the state's industrial facilities.

#### **Enhancing Water Supplies and Water Management -**

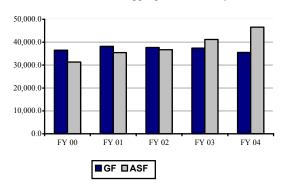
During the past several years DNREC has been working with the Water Supply Coordinating Council and others in development of a plan that will comprehensively address the water supply concerns. The collective goal over the next few years is to have in place the decisions, projects, and action items that will address needed drought contingencies both in the short- and long-term, in a manner that is smart with the public's money and is protective of the water resources of the State. DNREC will continue the development of Total Maximum Daily Loads (TMDLs) for practically all of the State's watersheds. In conjunction with this effort DNREC will be facilitating discussions among community leaders to develop Pollution Control Strategies to meet pollutant load reduction goals.

**Reducing Risks** - DNREC has invested more in identifying and tracking pollutants in the environment, than in tracking exposure to pollution, the distribution of disease and the relationship between health and the environment. However, DNREC and Public Health are working together to take advantage of new opportunities being offered by the Centers for Disease Control and EPA to enhance efforts for tracking and improving the understanding of the environment and health.

Working with Communities – As DNREC addresses water and air quality concerns, land use and management, habitat protection and the public's right to information concerning their surroundings, working with community groups to help them understand challenges and become involved in the solutions becomes increasingly important. The Community Ombudsman is reaching out to all communities to explain DNREC's role in land use and environmental protection, to address their concerns, and to monitor for any potential disproportionate environmental impacts resulting from racial or other socio-economic conditions within communities.

Improved Information Technology and Citizen Access - Over the past several years, significant investments have been made in data systems that will not only enhance the management of programs and the information they generate, but allow DNREC to present information in an understandable and readily available format through the internet including information on permitting enforcement and environmental releases.

#### **Five-Year Appropriation History**



#### **FUNDING**

	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	40,967.2	35,563.7	35,737.4
ASF	27,195.2	46,591.4	49,731.7
TOTAL	68,162,4	82,155,1	85,469.1

#### **POSITIONS**

	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	380.7	374.0	379.0
ASF	277.2	286.7	286.7
NSF	135.1	141.3	142.3
TOTAL	793.0	802.0	808.0

#### **FY 2005 BUDGET HIGHLIGHTS**

#### **OPERATING BUDGET:**

- ◆ Recommend structural change to transfer Boiler Safety (40-01-03) to Waste Management (40-09-03). This structural change includes \$260.2 in Personnel Costs and 5.0 FTEs, \$1.4 in Travel, \$21.1 in Contractual Services, and \$5.4 in Supplies and Materials.
- Recommend structural changes from the Office of the Secretary (40-01-01) to create the Office of Information Technology (40-01-05). These structural changes include \$689.9 and \$454.5 ASF in Personnel Costs; 11.5 FTEs; 8.1 ASF FTEs and 3.4 NSF FTEs; \$2.0 ASF in Travel, \$35.0 ASF in Contractual Services, and \$2.0 ASF in Supplies and Materials.
- ♦ Recommend enhancement of \$100.0 to Mosquito Control (40-05-04) for West Nile Virus control.
- ◆ Recommend enhancement of \$89.3 in Personnel Costs and 3.0 FTEs; \$46.5 in Contractual Services;

- and \$15.0 in Supplies and Materials for the Blue Ball Recreation Center. This historic site will encompass 347 acres of land, 4-5 miles of trails and a 14,000 square foot special use, historic facility.
- ♠ Recommend the creation of Emergency Prevention and Response (40-09-04). This structural change includes \$605.8 in Personnel Costs and 10.0 FTEs, 2.0 ASF FTEs and 1.0 NSF FTE; \$0.1 in Travel, \$21.5 in Contractual Services, \$7.7 in Supplies and Materials, \$200.0 ASF in HSCA Clean-up, \$525.8 ASF in Environmental Response; Cost Recovery, \$14.4 and \$30.0 ASF for SARA, \$300.0 ASF for Local Emergency Planning; and \$180.9 ASF in Extremely Hazardous Substance Program. This IPU will improve communications among all programs, provide a stronger functional alignment and provide a single point-of-contact for the public.
- ♦ Recommend enhancement of \$3,000.0 ASF from the federal Fiscal Relief Fund in Operations and Maintenance (40-06-02) for a State Park Water Quality Initiative, a program intended to enhance the water quality in Delaware State Parks.

#### **CAPITAL BUDGET:**

- Recommend \$22,100.0 for the Green Infrastructure Program. This program will seek opportunities to partner with environmental groups and work towards preserving important natural habitats and working forest lands.
- Recommend \$2,345.0 for the Conservation Cost Share program. This cost share program assists landowners by providing funds for the design and installation of Best Management Practices. The intent of the program is to protect water supplies and natural resources while minimizing erosion of farmland and the pollution of wildlife habitat.
- Recommend \$1,000.0 for the Dams/Water Control Structures program to replace the Haven's Lake Dam to improve public safety for those in the area of this water control structure.
- Recommend \$2,100.0 for renovation and other improvements to the Doxsee Site near Lewes. This project will also relocate the public boat ramp now located in Lewes.
- Recommend \$800.0 to continue the Tax/Public Ditch program.
- Recommend \$1,000.0 to continue the Beach Preservation and Replenishment.

- ◆ Recommend \$1,000.0 for the Minor Capital Improvements and Equipment program.
- Recommend \$227.0 for the Blue Ball Recreational Facility.
- ♦ Recommend \$1,000.0 for the Delaware Water Pollution Control Revolving Fund.
- Recommend \$10,000.0 for the Wastewater Management Account.
- Recommend \$1,500.0 for the Resource, Conservation and Development program. These funds are used to mitigate the drainage and water issues associated with development.

## OFFICE OF THE SECRETARY 40-01-00

#### MISSION

To oversee the development and implementation of state environmental, natural resource and recreational policies and programs; promote employee productivity through technology and training; manage the department's financial and human resources; promote quality and continuous improvement of programs; assist other agencies in the promotion of environmentally sound, economic development; and coordinate policy among the department's divisions.

#### **KEY OBJECTIVES**

- Increase percentage of facilities in compliance at time of inspection from Fiscal Year 2002 baseline.
- Implement the chronic violator regulations in 2004 and evaluate chronic violator designations as appropriate.
- Monitor and control the occurrence of environmentally related exposures and diseases.
- Protect and enhance the natural attributes of Delaware's Coastal Zone in order to maintain and enhance fish and wildlife populations and provide recreational opportunities.
- Implement e-government initiatives and continue the development and implementation of the Environmental Navigator to comply with 7 Del. C. §6014 (a).
- Coordinate land use activities with other agencies, the Office of State Planning Coordination and county and municipal governments to preserve open space, and minimize impacts to habitat, air and water quality.
- Enhance the fairness, consistency, predictability, deterrence value and efficiency of the DNREC enforcement process.
- Engage state, federal and local government, universities, environmental and citizen groups, major private landowners, and agricultural and business communities to implement on the ground, priority actions for biodiversity conservation and ecosystem protection.

#### BACKGROUND AND ACCOMPLISHMENTS

**The Office of Information Technology** (OIT) is responsible for the overall management of the information resources of the department to ensure that investments in information resources are optimized in terms of benefit to the department and its constituents.

The main objective of OIT is to provide information to decision makers, to protect human health and environment, manage fish and wildlife and enhance recreational opportunities. In order to achieve this objective, OIT is developing an integrated information system containing facility, permitting, enforcement, ambient monitoring and natural resource data.

The integrated information system will improve Delaware's ability to take a comprehensive approach to environmental management that is essential for priority conservation initiatives. In August 2002, the department released this centralized database accessible to the public via the Internet that integrates wastewater discharge, air emissions, salvage yards, hazardous waste, solid waste, underground tanks, and vapor recovery sites.

The department has initiated Electronic Document Management in two of its programs. This initiative will be extended to other programs within the department over the next three years. The Notification System required under Senate Bill 33 to notify the public of environmental releases in their neighborhood has been operational since February 2002. The department has revamped its web site to an intentions-based site that enforcement actions, includes violations environmental releases among many other items of public interest. In August 2001, a ListServ feature was established where the public could self-select to be notified by e-mail of press releases, enforcement actions, mosquito control spray events, ozone alerts and beach monitoring conditions. These e-government initiatives are being further expanded to include sales over the Internet of licenses and permits. The first phase consisted of Park Passes and On-Site Waste Water License renewal and was released in September 2003. Other phases involve the sale of fishing/hunting licenses, renewal of boat registration, sale of souvenirs, submission of asbestos and water reports and requests for septic and well licenses. These will be completed by March 2004.

**Ecosystem Protection** increases the awareness of the importance of preserving plants, animals and natural communities that support a healthy, Livable Delaware. The office currently supports several priority initiatives: Biodiversity Conservation Partnership, Whole Basin Management, Livable Delaware, and Delmarva

Conservation Corridors. These programs promote collaboration among state and federal partners and the development and implementation of tools and strategies to protect biodiversity and preserve the natural resources and working lands. The Biodiversity Conservation Partnership, initiated in May 2000, is a coordinated public-private partnership dedicated to improving the status of the state's biological diversity. The partnership has focused on several priorities to identify opportunities for biological resource protection, resource management, land management, restoration, and education and outreach activities.

Ecological Restoration restores function and value of streams, drainage ditches, wetlands and riparian An Ecological Restoration Team was corridors. established by the department to focus their expertise and resources on restoration projects to reestablish biological diversity. The team is implementing techniques that accelerate the ecological processes resulting in projects which replicate natural functioning ecosystems. The efforts of the Ecological Restoration Team yield positive environmental results that support priority initiatives such as: Livable Delaware, the Biodiversity Conservation Partnership, BioLegacy, TMDLs, land use planning, land preservation and restoration and source water protection.

The Office of Public Affairs issued approximately 400 press releases, held 15 press events and coordinated 1,000 responses to media inquiries over the past year to promote and explain department news, initiatives, issues, events and special projects. Publications (print, video and on-line) include press releases which are published on-line and delivered electronically to the list-serve of on-line subscribers. DNREC News, a bi-weekly news package that is distributed on-line and in print form to over 600 subscribers, includes regulatory information and a calendar of public hearings and meetings and other events. The office also coordinates educational activities including the Annual Water Festival for seventh grade students that supplement the Watershed curriculum and the Make A Splash with Project WET event for third to seventh graders. In the last two years, more than 2,700 students and 100 teachers have attended these events.

The Planning and Compliance Assistance Office provides pollution prevention and non-regulatory permitting and compliance services for small and large businesses through the Clean Air Act. The land use planning staff has worked with the Office of State Planning Coordination in implementing the Livable Delaware Initiative, providing assistance to local governments and the development community through the LUPA and county advisory committee processes and in implementing the Coastal Zone Act Regulations.

The Human Resources Office (HRO) has continued its efforts in the areas of recruitment and diversity, expanding the recruitment sources to include more minority-based contacts, extending DNREC into the community with personal contacts, and continuing the effective partnership with DelDOT. Additionally, DNREC has actively participated in the Partners for Progress Summit. In the area of diversity, the Diversity Action Committee and the Secretary have been championing required training for all employees in sexual harassment. Information sessions for employees and/or managers in the following areas were delivered: Coaching, Counseling and Disciplining, Hiring Process, Refresher Training for Managers on HR Processes, Guidelines on Disciplinary Action, more in-depth Sexual Harassment Training for selected groups and Open Enrollment Sessions on benefits for employees.

	]	FUNDING	
	FY 2003 ACTUAL	FY 2004 BUDGET	FY 2005 GOV. REC.
GF	3,384.3	4,602.2	4,419.8
ASF	1,650.7	3,165.1	3,165.1
TOTAL	5,035.0	7,767.3	7,584.9
	P	OSITIONS	

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	FY 2003 ACTUAL	FY 2004 BUDGET	FY 2005 GOV. REC.
GF	33.7	45.6	40.6
ASF	21.3	28.4	28.4
NSF	1.0	7.0	8.0
TOTAL	56.0	81.0	77.0

## OFFICE OF THE SECRETARY 40-01-01

- Assist the divisions to meet their human resource, financial, legislative, policy and other needs promptly and accurately.
- Provide for rational, accurate and responsive budgeting and financial management processes.
- Work with the Division of Public Health to examine the capabilities for environmental health tracking and prepare an action plan for initiation of a tracking program.
- Assess the department's workforce diversity and target/develop programs to address needs.
- Develop and distribute communications products that heighten awareness of environmental issues in communities and suggest opportunities to reduce

- environmental impacts. These products include a citizen guide to watersheds and TMDLs, natural heritage guides on species and habitats, press releases, DNREC News, Outdoor Delaware magazine and various fact sheets, newsletters and brochures.
- Work with community organizations, homeowner associations and other groups in helping them participate in DNREC's programs and to address their environmental concerns.
- Sponsor and participate in special events designed to raise people's awareness such as the State Fair, Coast Day, Earth Day, the Coastal Cleanup and Christina River Cleanup.
- Sponsor training for educators on environmental issues and supplemental environmental education materials and curriculum including the Watershed Education unit.

#### PERFORMANCE MEASURES

	FY 2003	FY 2004	FY 2005
	Actual	Budget	Gov. Rec.
Acres of land of high			
biodiversity value protected	N/A	*	*
% of facilities in compliance			
at time of inspection from the			
FY02 baseline	N/A	*	*
# of Chronic Violator			
designations	N/A	1	1

<sup>\*</sup>FY 2004 will establish benchmark data for new performance measures.

## PLANNING AND COMPLIANCE ASSISTANCE 40-01-02

#### **ACTIVITIES**

- Coordinate, through the LUPA and the county advisory committees, the preparation of site-specific recommendations concerning proposed new developments and land uses.
- Assist county and local governments with incorporating environmental and natural resource concerns into their comprehensive plans, ordinance revisions, zoning changes and policy development.
- Coordinate the department's Livable Delaware activities and provide planning assistance for biodiversity conservation.
- Provide pollution prevention assistance to industry, local governments and citizens through on-site technical assistance, pollution prevention roundtables and the publication of guides and brochures.

- Work with DNREC's regulatory programs on incorporating pollution prevention into permitting processes and compliance activities.
- Assist in the development of a recognition program for Delaware's manufacturing facilities that exhibit superior regulatory compliance and environmental stewardship.
- Act as first point of contact for small businesses on Clean Air Act issues and assist them with permitting and compliance issues.
- Coordinate with small businesses when upcoming regulations have a small business impact and educate them on the regulations and how to costeffectively comply.
- Provide general assistance and information on DNREC permitting programs and provide a central point of contact through the Development Advisory Service.
- Administer the Coastal Zone statute and provide timely, efficient services to industries seeking permits or status decisions.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
# of projects reported on for local land use decision			
makers	243	200	250
Development Advisory Service customers	15	12	12
Clean Air Act ombudsman assistance efforts	48	45	45
Pollution prevention assistance efforts	40	35	45
CZA permits issued	3	2	4
CZA status decisions	4	4	5

## **ENERGY OFFICE 40-01-04**

- Act as a central repository and clearinghouse for collection and dissemination of data and information on energy supply, demand, costs, projections, and the environmental impacts of energy generation and use.
- Promote alternative fuels, renewable energy sources, innovative energy technologies, and other means of addressing energy demands.
- Promote energy conservation and energy efficiency as means to reduce energy consumption.
- Administer the Green Energy Fund

- Coordinate with other state and federal agencies in the management of energy data and the management of renewable energy generation, energy efficiency and conservation efforts.
- Provide for a program of energy audits of state facilities and training of energy auditors.
- Assist the Division of Facilities Management in developing the state facilities energy management plan.
- Provide assistance to emergency management officials in planning for energy emergencies.
- Conduct the federally required components of the State Energy Plan grant program awarded by the US Department of Energy.
- Implement the recommendations of the Governor's Energy Task Force.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
# of projects funded through			
the Green Energy Fund	*	*	25
# of workshops/seminars held	*	*	10

<sup>\*</sup>The Energy Office was transferred to DNREC in Fiscal Year 2004.

## OFFICE OF INFORMATION TECHNOLOGY 40-01-05

#### **ACTIVITIES**

- Maintain the network for over 850 employees in main office and satellite offices
- Provide Helpdesk services to over 850 employees throughout the department
- Ensure that all the software are properly licensed and upgraded as needed
- Maintain and upgrade existing applications
- Continue the integration of environmental information into the Environmental Navigator and make the information available to the department staff and public
- Further the development of e-government initiatives to allow public do business online with the department
- Continue to implement the Electronic Document Management system in the department.

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Percent of online usage by			
each of these services.	*	*	*
Average # of public and departmental staff visiting the Navigator web site daily and average amount of time spent on the site.	*	*	*
Number of people subscribing			
to electronic notification services	*	*	*

<sup>\*</sup>FY 2004 will establish benchmark data for new performance

## FISH AND WILDLIFE 40-05-00

#### MISSION

To conserve and manage the fish and wildlife resources of the state; to provide safe and enjoyable fishing, hunting, and boating opportunities to the citizens of Delaware and its visitors; to manage and make available for public use and enjoyment the lands with which it has been entrusted; and to improve the public's understanding and interest in the state's fish and wildlife resources through information and outreach programs.

#### **KEY OBJECTIVES**

#### **Maintaining Tidal Fisheries Management**

- Increase investigations of events in the aquatic environment that result in the loss of natural habitat, fish population changes and fish kills.
- Implement and update interstate fishery management plans and regulations for 30 species of marine fishes and shellfish to remain in compliance with interstate fishery management plans.
- Develop and expand artificial habitat (reefs) to colonize benthic organisms in support of marine fisheries on 11 sites in the Delaware Bay and Atlantic Ocean.
- Re-establish a viable commercial oyster fishery with direct harvest from natural oyster beds.
- Improve public participation in marine fisheries management and improve game fish populations in tidal fresh water.

### Protecting, Restoring and Enhancing Fisheries and Wildlife Habitat

- Implement the existing state-level responsibilities for achieving the goals and objectives of the North American Waterfowl Management Plan, and achieve the restoration goals identified in the Northern Delaware Wetlands Rehabilitation Plan.
- Develop one comprehensive Wildlife Area Management Plan each year that provides a basis for habitat and species management, hunting and observation opportunities, and improves the quality of the environment.
- Work with the Riverfront Development Corporation to establish and manage the Russell W. Peterson Urban Wildlife Refuge and Wetlands Education Center in Wilmington.

- Implement the Inland Bays Water Use Plan by working closely with the Inland Bays Working Group.
- Control aquatic weeds and algae in public ponds to maintain water quality, aesthetics and boating access.
- Complete a Statewide Comprehensive Wildlife Plan by the year 2005 as mandated by the U.S. Fish and Wildlife Service under funding provided by the State Wildlife Grants Program.

#### **Fostering Partnerships with Private Landowners**

- Reduce and control nuisance animal and plant species on public and private lands and waters/wetlands in order to improve wildlife and fisheries habitats.
- Enhance technical assistance support to private landowners to develop habitat for Delaware's wildlife species of concern. Technical assistance initiatives will be funded by a new federal grant from the U.S. Fish and Wildlife Service entitled "Landowner Incentive Program".

### **Expanding and Enhancing the Non-Game Program** for Biodiversity

- Continue protection, recovery and management plans (federal or state) for endangered, threatened, or species of special concern on an annual basis to enhance the state's biodiversity. Funding provided by the U.S. Fish and Wildlife Service under the Wildlife Conservation and Restoration Program and State Wildlife Grants Program are being used to expand biodiversity conservation efforts in accordance with Livable Delaware precepts.
- Conduct surveys and maintain information on the distribution and status of the state's flora, fauna, and natural communities, with an emphasis on rare species, and provide this information and expertise to public agencies and private organizations to enhance the state's biodiversity.

#### **Prevent Mosquito-borne Diseases**

• Continue surveillance/monitoring and control or treatment activities to prevent or lessen outbreaks of West Nile Encephalitis or Eastern Equine Encephalitis.

 Control pestiferous mosquito populations at tolerable nuisance levels, for quality-of-life factors and to lessen possible outbreaks of mosquito-borne disease.

#### BACKGROUND AND ACCOMPLISHMENTS

Fish and Wildlife programs are developed and administered to serve the interests of all of the residents of Delaware. The division works with all segments of constituencies to identify their needs and interests in fish and wildlife resources. The division advocates the use of fish and wildlife including observation, study, hunting, fishing and trapping in a humane manner without threatening the continued existence of any species.

Fish and Wildlife has developed the following key operational priorities that support the department's strategic plan.

Applied Habitat Research, Management and Restoration promotes the conservation of biological diversity by avoiding the unnecessary threat to, or extinction of, living species.

- The division continues working with the Advisory Council and farmers to resolve deer damage issues.
   In 2002, 241 landowners participated in the division's Deer Damage Assistance Program throughout the State.
- The division instituted additional restrictions on horseshoe crab harvests that will take effect in 2004.
   All regulations concerning horseshoe crab harvests were revised.
- The division continued to work with Soil and Water Conservation in Fiscal Year 2002 to establish freshwater wetland habitat on the Norman G. Wilder and Nanticoke wildlife areas and to compensate for wetlands lost due to drainage project construction.

**Species Research and Monitoring** provides the basis for management of fish and wildlife stocks and populations.

- The summer flounder fishery is recovering according to schedule and weakfish striped bass in the Delaware Estuary have been declared recovered.
- Delaware is in compliance with 22 fisheries management plans required under the Atlantic Coast Fisheries Cooperative Management Act and 8 other plans administered by the Mid Atlantic States Fishery Management Council.
- The Departments of Natural Resources and Environmental Control, Health and Social Services and Agriculture continued the West Nile Virus

- Working Group in order to develop and implement a statewide coordinated surveillance, monitoring and treatment program to prevent or lessen outbreaks of mosquito-borne West Nile Encephalitis.
- The Natural Heritage database of rare species and natural communities was used to conduct 169 environmental reviews and information requests in 2002
- The division continues to monitor for the occurrence of wildlife diseases including Chronic Wasting Disease, and other animal diseases that may have the potential to impact Delaware residents.

**Enforcement** provides public safety services in the areas of boating, hunting and fishing.

 The Enforcement Section is offering a boating safety certificate Online with Boat Ed. This online course is the first Online Boating Certificate offered by the Enforcement Section. Out of State boaters are now able to receive a Delaware Boating Education Certification Online before operating a vessel in Delaware waters.

**Education and Training** provides outreach opportunities that improve the awareness, appreciation and conservation of Delaware's natural resources by the users of this heritage.

• The Aquatic Resource Education Program continues to be an important program for young people who are interested in increasing their awareness about the importance of Delaware's aquatic habitats.

**Infrastructure Maintenance and Development** provides public hunting areas and boating/fishing access sites that are environmentally sensitive, modern, safe, clean and convenient so that the state's natural resources are available to all.

 A new boating access site was opened in Newport that includes two ramps and parking for 51 vehicle/trailer units. Engineering work was initiated to replace the water control structures at Chipman and Record Ponds. The water control structure at Hearns Pond was replaced, water levels were restored and the pond re-stocked with fish.

	FUNDING			
	FY 2003 ACTUAL	FY 2004 BUDGET	FY 2005 GOV. REC.	
GF	6,277.5	5,890.7	6,017.8	
ASF	2,521.7	5,543.7	5,543.7	
TOTAL	8,799.2	11,434.4	11,561.5	

#### **POSITIONS**

	FY 2003	FY 2004	FY 2005
_	ACTUAL	BUDGET	GOV. REC.
GF	65.0	60.4	60.4
ASF	32.8	34.4	34.4
NSF	29.2	31.2	31.2
TOTAL	127.0	126.0	126.0

MANAGEMENT AND SUPPORT - FISH AND WILDLIFE 40-05-01

#### **ACTIVITIES**

- Direct, plan and coordinate the administration of total division program strategies and objectives including mosquito control, fisheries and wildlife resource initiatives.
- Represent the division on regional organizations such as the Atlantic States Marine Fisheries Commission, Atlantic Flyway Council and the International Association of Fish and Wildlife Agencies.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Issue at least 2 editions of a division newsletter to			
hunters, anglers and boaters	2	2	2

## WILDLIFE/FISHERIES 40-05-02

#### **ACTIVITIES**

- Conduct research surveys and inventories of fish, shellfish and wildlife populations.
- Develop fish and wildlife management plans for 15 state-owned wildlife management areas, manage 52 freshwater pond and marine fishing access sites, and comply with management plans for 32 species of marine fish and shellfish.
- Monitor, maintain and regulate harvestable fish and wildlife populations.
- Provide technical assistance to landowners and government agencies.
- License and monitor the users of fish and wildlife resources.

- Administer a non-game and endangered species program and hunter education training program.
- Monitor fishes for diseases and investigate fish kills as to their extent and probable cause.
- Acquire, develop, and maintain lands and waters for recreation and conservation.
- Control aquatic and non-indigenous plants and improve fish and wildlife habitat.
- Develop and implement wetland enhancement programs and coordinate and conduct fish, wildlife, acquisition, and hunter education and aquatic resource education activities.
- Conduct a trout stocking program in all three counties.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Increase the number of acres of actively managed wildlife habitat on public lands by			
5% annually	6,817	7,335	7,700
Comply with Fisheries Management Plans (number)	23	23	23
Increase the number of Hunter Education Certifications by a minimum of 5% per year to minimize			
hunter related accidents	1,685	1,883	1,977

### MOSQUITO CONTROL 40-05-04

- Monitor mosquito populations and levels of nuisance or disease and provide temporary controls in response to disease outbreak.
- Investigate and assess controls via Open Marsh Water Management (OMWM) / Integrated Marsh Management (IMM), impoundment management, mosquito fish stocking, woodland control and insecticides.
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations and continue the implementation of wetland rehabilitation within the Christina/Delaware River Corridor.
- Administer education programs as they relate to wetland restoration mosquito control problems and Integrated Marsh Management needs.

• Coordinate with the Riverfront Development Authority to restore Dravo Marsh (Wilmington Wildlife Refuge).

#### **PERFORMANCE MEASURES**

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
On a statewide basis, continue to			
treat 300 acres of salt marsh			
mosquito breeding habitat per			
year using Open Marsh Water Management techniques	347	300	300
On a statewide basis from June			
through August, continue to			
achieve a 75% or greater			
nuisance free nights	89	75	75
Based on targets of opportunity			
and available resources, annually			
restore at least 100 acres of			
degraded wetlands under the			
Northern Delaware Wetlands			
Rehabilitation Program	110	>100	>100

## **DOG CONTROL** 40-05-05

#### **ACTIVITIES**

- Administer a statewide dog control program through contracts with the Delaware and Kent County SPCAs.
- Service complaints about dog law violations.
- Monitor dog law compliance.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Increase # animals to shelters statewide by			
5%/year	23,208	11,544	12,121
# of complaint services	16,692	17,672	17,672

## FISH AND WILDLIFE ENFORCEMENT 40-05-06

#### **ACTIVITIES**

- Prevent, investigate, and prosecute illegal natural resource activity within the State of Delaware.
- Provide environmental education opportunities through Boating Safety and Hunter Safety education programs.

- Conduct marine search and rescue operations and conduct statewide marine rescue training for coastal fire departments.
- Manage and administer the state vessel registration program.
- Assist the Department of Public Safety and Homeland Security with homeland security activities in the prevention of terrorism on U.S. land.

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Increase boating safety			
certifications by a minimum of			
5% per year in order to reduce			
boating related accidents	1,399	1,611	1,691
Reduce boating safety accidents			
by 5% per year	8	23	21

## PARKS AND RECREATION 40-06-00

#### MISSION

To provide state parks, facilities and programs for outdoor recreational use; to protect natural resources in parks, nature preserves and greenways; to provide technical, financial and planning assistance to the public for park, recreation and conservation areas; and to make available natural and cultural interpretive and educational services.

#### KEY OBJECTIVES

- Annually protect 2,000 acres of land through the Open Space Program, through purchase, donation and conservation easements, for parks, wildlife areas, state forests, cultural sites and greenways.
- Assist in the addition of parkland and outdoor recreation facilities at municipal and county levels through grant assistance.
- Reduce major rehabilitation expenditure and curb facility deterioration by increasing preventive maintenance.
- Locate and identify prehistoric and historic cultural resources on DNREC landholdings, and develop cultural resources management plans for state parks, nature preserves and wildlife areas.
- Reduce visitor and employee accidents in state parks.
- Continue creative partnerships with profit and notfor-profit organizations to provide park services and raise funds.

#### BACKGROUND AND ACCOMPLISHMENTS

Parks and Recreation has five administrative sections to carry out its mission:

- Management and Support
- Operation and Maintenance
- Cultural and Recreational Services
- Planning, Preservation and Development
- Wilmington State Parks

Eleven field offices statewide are responsible for overseeing the operation of 20,310 acres in 14 state parks, the Brandywine Zoo and Baynard Stadium. The division also manages seven nature preserves (507)

acres), 12 other sites (3,220 acres) outside of the parks and 60 conservation easements protecting an additional 2,331 acres.

The division operates units containing a variety of landscape and natural resource features from rolling terrain in the uppermost regions of New Castle County to lands and inland ponds throughout the state to coastal beaches in Sussex County. Cultural and historic resources are protected and interpreted while a wide variety of recreational facilities are provided for Delawareans and out-of-state visitors.

# MANAGEMENT AND SUPPORT - PARKS AND RECREATION 40-06-01

#### **ACTIVITIES**

- Oversee administrative functions: budget, personnel, legislation, fiscal control, and volunteer administration.
- Provide guidance in the development of the Capital Improvement Plan.
- Coordinate services for five citizen advisory councils.
- Manage Twenty-First Century Park Endowment funds and all state park trusts.

#### PERFORMANCE MEASURES

	FY 2003 Actual		FY 2005 Gov. Rec.
% increase of volunteer hours	14	2	2

#### **FUNDING**

	FY 2003	FY 2004	FY 2005
_	ACTUAL	BUDGET	GOV. REC.
GF	9,538.7	8,137.9	8,299.5
ASF	7,758.0	9,201.2	12,251.2
TOTAL	17,296.7	17,339.1	20,550.7

#### **POSITIONS**

	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	105.5	101.0	106.0
ASF	62.5	64.0	64.0
NSF	1.0	1.0	1.0
TOTAL	169.0	166.0	171.0

## *OPERATIONS AND MAINTENANCE* 40-06-02

#### **ACTIVITIES**

- Manage daily operations of 14 state parks including special revenue generating facilities (Biden Environmental Center, Killen's Pond Water Park, Cauffiel Estate, Judge Morris, Bellevue Hall, Indian River Marina).
- Enforce state park rules and regulations, and provide for site and visitor safety and security, including a water safety program.
- Establish and manage a retail sales program including gift shops, vending and camping supplies.
- Administer a central reservation system for camping and other visitor services.

#### PERFORMANCE MEASURES

	FY 2003	FY 2004	FY 2005
	Actual	Budget	Gov. Rec.
Increase park and facility revenue by 3% annually	-2	3	3

## CULTURAL AND RECREATIONAL SERVICES 40-06-03

#### **ACTIVITIES**

- Plan and administer programs and special events for the public including day camps, natural and cultural resource interpretive programs and exhibits, and folklife interpretation.
- Conduct special events for the public (i.e., Howard Pyle Pirate Festival, Garrison Weekend at Fort Delaware, and concerts).
- Provide environmental education programs that meet Delaware state standards and performance indicators.
- Conduct historic and prehistoric archaeological surveys and preservation management plans.

• Manage publication and information services including research, editing and digital design for all commercially printed state park publications.

#### PERFORMANCE MEASURES

T EIG GRUNN (CE TITELIS CRES				
	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.	
Increase the % of people				
participating in park programs	-27	2.5	2.5	
Produce or revise 12 wayside				
exhibits annually.	24	12	12	

## PLANNING, PRESERVATION AND DEVELOPMENT 40-06-04

- Plan, design, engineer and construct facilities and infrastructure within the state park system.
- Administer Open Space Program for the acquisition of public natural resource lands.
- Coordinate conservation easement protection efforts on private lands.
- Coordinate all real estate issues including utility easements, use agreements and agriculture easements.
- Administer the Natural Areas Program through the Land Preservation Office as defined by law.
- Develop and implement comprehensive natural resource management plans, including wildlife and invasive species issues.
- Administer state and federal grants and provide technical assistance to county and local governments for land acquisition, outdoor recreation facility and greenway development.
- Plan and develop state park trail system.
- Coordinate and oversee the Council on Greenways and Trails, Natural Areas Council, and the Open Space Council.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Protect 2,000 acres that			
meet the criteria of the			
Land Protection Act	2,344	2,000	2,000
Increase miles of multi-use			
trails in state parks*	11	8	11
# of new areas or additions			
to existing natural areas or			
state resource areas	N/A	**	**
# of conservation			
easements that meet the			
criteria of the Land			
Protection Act	N/A	**	**

<sup>\*</sup>Reflects annual miles of trails and not cumulative miles.

## WILMINGTON STATE PARKS 40-06-05

#### **ACTIVITIES**

- Manage the Brandywine Zoo and Baynard Stadium including upgrade of facilities.
- Continue to upgrade standards through comprehensive maintenance and Capital Improvement Plans.
- Provide public interpretive programming and coordinate special events and facilities incorporating division rules and regulations.
- Provide pedestrian links between the various parks and acquire remaining land in holdings at Alapocas Woods.
- Continue to develop relationships with surrounding neighborhood associations and City of Wilmington officials.
- Develop Blue Ball property (building restoration, trail development and other infrastructure improvements).

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Increase % visitors to			
Brandywine Zoo	-20	5	5
Maintain number of stadium			
events at 40 per year	40	40	40
Maintain number of stadium			
field events at 25 or less to			
protect turf	20	25	25
Increase number of new park			
programs offering	4	8	4
Restore two historic			
monuments/statues annually	2	2	2

<sup>\*\*</sup>FY 2005 will establish benchmark data for new performance measures.

## SOIL AND WATER CONSERVATION 40-07-00

#### MISSION

To preserve and protect the state's soil, water and coastal resources by managing the state's shoreline, coastal zone and navigable waterways; regulate coastal and urban land use and construction activities; promote wise agricultural and urban land management practices; promote wise water management practices to preserve local agricultural interests; protect urban communities and provide for public safety; and ensure that federal activities, permits and licenses, outer continental shelf plans and grants-in-aid are consistent with economic and environmental policies.

#### **KEY OBJECTIVES**

- Assist the Nutrient Management Commission in managing and regulating the generation and application of nutrients in order to meet load reduction targets established by approved Total Maximum Daily Loads (TMDLs) and meet or exceed surface water quality standards for nutrients by 2007; establish a Nutrient Management Planning Program; and formulate a systematic and economically viable Nutrient Management Program that maintains profitability and improves water quality.
- Manage stormwater runoff and fully implement the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program for new construction activity.
- Protect 2,000 additional acres of land through the construction of drainage, flood control and water management systems.
- Ensure the protection of human life, property and the environment through the development and implementation of a comprehensive dam safety program.
- Reduce wetland impacts by 25 percent during planning and construction of new tax/public ditch projects and by ten percent for maintenance of existing tax/public ditch projects.
- Achieve no net loss of recreational and protective beach area along the publicly accessible, developed portions of the Delaware Bay Shore and Atlantic Ocean coast as measured on a three to seven year re-nourishment cycle.

- Reduce impacts from coastal storms on buildings and infrastructure built adjacent to the Atlantic Ocean and Delaware Bay.
- Install and maintain aids to navigation in public waterways within the Inland Bays.
- Complete two dredging projects in publicly accessible areas statewide, including small boat navigation channels, lakes/ponds, boat launching/marina facilities or Delaware Bay beach areas.

#### BACKGROUND AND ACCOMPLISHMENTS

**Drainage** - In the past nine years, the division has administered 939 Rural Conservation and Development projects, including a variety of flood abatement and drainage projects that were funded with \$49.9 million from the Twenty-First Century Fund. Approximately 59 percent of the jobs in the first eight fiscal years have been completed. Approximately 7.7 percent of the projects will not be completed primarily due to right-of-way problems. This brings the total projects finished to 66.7 percent. During Fiscal Year 2003, the department received 528 requests for drainage assistance of which 73 percent have been resolved. The remainder have been investigated and are pending due to rights-of-way, permits and/or funding.

Shoreline and Waterway Management - Delaware's beaches are generally eroding and migrating landward in response to coastal storms and sea level rise. Initiatives such as beach nourishment projects, structural erosion control measures, public dune maintenance and emergency storm repair and cleanup are carried out to improve protection to shorefront homes, businesses, roads and utilities and enhance the basis of the State's coastal recreation and tourism industry. Since 1994, over 2.6 million cubic yards of sand have been placed on Delaware beaches. cooperation with local governments, the division conducted an economic analysis of the value of beaches to the State in 1998, which was called for by the Beach Replenishment Task Force. The analysis estimated severe economic losses over the next five years if the ocean beaches were no longer replenished. Since the five year horizon of that analysis has past, a new economic analysis of the value of beaches to the State has been initiated. The division/department is the local sponsor of cost shared coastal studies and projects with the federal government (Corps of Engineers). construction of the federal shore protection project at Roosevelt Inlet/Lewes Beach began in Fiscal Year 2004. The federal shore protection project at Rehoboth Beach and Dewey Beach, which will involve the placement of sand and the creation of a dune at both beach areas and periodic nourishment every three years to ensure the integrity of the design, is scheduled to begin in 2004.

Since its inception in 1970, the State Dredge Program has completed over 140 projects in a variety of marine environments, including small boat navigation channels, state owned lakes and ponds, boat launching and marina facilities and beach nourishment along the Delaware Bay coastline. Projects completed during the last two years include navigational channel projects in Indian River near Millsboro, Massey's Ditch, the downstream portion of Indian River and maintenance dredging of the Delaware City Mooring Basin and Branch Canal. Dredging of the Indian River Inlet Marina basin and beach replenishment projects at Broadkill Beach and Slaughter Beach are currently in progress. Projects planned for future implementation include the Assawoman Canal, the Augustine Beach boat launching facility, Garrisons Lake, Love Creek, the Lewes-Rehoboth Canal, as well as ongoing maintenance work in Indian River and Massey's Ditch. In an effort to improve their ability to properly manage waterways, the division entered into a cooperative agreement with the U. S. Coast Guard in 2001 to establish aids to navigation (i.e., channel markers) in the state's Inland Bays in areas that the Coast Guard does not mark. Under the purview of this agreement, channel markers have been established in sections of Herring Creek and the upstream portions of Indian River and White Creek. Improvements have also been made to previously established markers in the Little Assawoman Bay and Roy Creek. The division will continue to share the responsibility with the U. S. Coast Guard for placing and maintaining channel markers in Rehoboth Bay and the federal channels in Massey's Ditch and downstream Indian River.

**District Operations** - District Operations assists the conservation districts in tailoring the programs to meet the needs of diverse constituents, oversees the statewide implementation of the state's Sediment and Stormwater program, and coordinates statewide non-point source pollution control programs. District Operations programs combine research and education, technical assistance, financial incentives, and regulation with interagency and private partnerships. All programs target Delaware's top two non-point source pollutants: excess sediment and nutrients.

The Sediment and Stormwater Management program has successfully designed and coordinated training and implementation projects throughout the state. To date, over 5,000 people have participated in the training. The program will also be implementing the EPA National Pollutant Discharge Elimination System (NPDES) Phase II for construction activities that became effective in March 2003. In efforts to better manage nutrients from animal operations, the division, in conjunction with the Natural Resources Conservation Service (NRCS) and Farm Service Agency

(FSA), has applied for and received \$8.2 million in federal Conservation Reserve Enhancement Program (CREP) funding to create more than 6,000 acres of filter strips, buffers and wetlands. The District Operations Section through the Conservation Districts assists agricultural producers in complying with the Nutrient Management Planning requirement established by the Delaware Nutrient Management Law.

Coastal Management Programs - The Delaware Coastal Programs (DCP) has provided grant funding to enhance the ability of local governments to conserve, manage, or protect habitat and natural resources in Delaware. Local communities (e.g. maintenance corporations, homeowner associations, etc.) are also eligible for the restoration and management of community open space as natural habitat. Over \$100,000 has been awarded and many acres of open space converted to habitat for biodiversity.

The Delaware National Estuarine Research Reserve (DNERR) Education Program is aimed at increasing environmental ethics among natural and coastal resource users. By translating research into a format usable to coastal decision-makers and other users, it provides a critical and often absent link between research, management, and education. The Coastal Training Program (CTP) and Coastal Decision-Maker Workshops (CDMWs) are the two aspects of the education program that are essential to providing current environmental information to those who make decisions affecting coastal resources. The CDMWs have proven to be an effective way to pass along scientific information regarding various environmental "high priority concerns" to elected government officials, policymakers, and the public. The CTP is a new program that will build upon and expand this successful program. It will significantly increase the DNERR's ability to provide coastal resource management guidance to those who can use it most effectively for protecting Delaware's fragile resources. The DNERR has completed a Market Analysis and Needs Assessment for Coastal Training in Delaware in support of CTP implementation.

The DNERR Research Program conducts meteorological and water quality monitoring through the System Wide Monitoring Program (SWMP). It is also involved with research projects relating to horseshoe crab and shorebird ecology, benthic mapping, and water quality monitoring of development pressures. The DNERR also partners with Delaware State University to conduct environmental modeling through the Environmental Cooperative Science Center Program.

A new addition to the St. Jones Reserve facility was completed in July 2003. The wing includes a small conference room, restrooms with shower facilities, and facilities for visiting researchers and groups.

	]	FUNDING	
	FY 2003	FY 2004	FY 2005
_	ACTUAL	BUDGET	GOV. REC.
GF	6,734.3	4,917.5	4,845.0
ASF	222.1	8,020.7	8,020.7
TOTAL	6,956.4	12,938.2	12,865.7
	P	OSITIONS	
	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	47.7	45.7	45.7
ASF	2.0	2.5	2.5
NSF	15.3	15.8	15.8
	13.3	10.0	10.0

MANAGEMENT AND SUPPORT - SOIL AND WATER 40-07-01

#### **ACTIVITIES**

- Provide administrative direction and supportive professional and technical services to all divisional programs and projects.
- Provide liaison among local, county, state and federal governmental legislators, officials and agencies.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
% fiscal documents received, reviewed and processed within			
five business days	N/A	N/A	*

\*FY 2005 will establish benchmark data for new performance measures

## **DRAINAGE 40-07-02**

#### **ACTIVITIES**

 Conduct environmentally sensitive tax ditch planning and public ditch planning, assist counties with mandates to property owner file, and provide technical assistance.

- Ensure the implementation of the state's "no-netloss of wetlands" policy in water management projects and continue the development of wetland and stream restoration techniques and concepts in support of DNREC's Ecological Restoration Initiative.
- Provide technical assistance to county conservation districts.
- Cooperate and assist the Department of Transportation with emergency bridge replacement as needed.
- Provide education outreach to agricultural and environmental communities to demonstrate the working relationship of drainage, agriculture and wetlands.
- Encourage the establishment of riparian corridors along tax ditch rights-of-way to support the department's Whole Basin Initiative, Conservation Reserve Easement Program (CREP), and the implementation of Total Maximum Daily Load Pollution Control Strategies.
- Develop and implement dam safety regulations and dam inspection standards, provide emergency action plans, and provide assistance to private dam owners.
- Investigate and implement solutions to the Resource Conservation and Development Projects funded through the Capital Improvement Act and the Twenty-First Century Fund.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Increase acres of agricultural			
and residential land			
receiving drainage, flood			
protection and water			
management	440,569	442,569	444,569
# of acres of wetland			
restoration developed and			
constructed in marginal			
agricultural fields and/or			
adjacent to streams and tax			
ditches	N/A	N/A	*
# of ft. of stream restoration			
projects developed and			
constructed	N/A	N/A	*

\*FY 2005 will establish benchmark data for new performance measures

## SHORELINE AND WATERWAY MANAGEMENT 40-07-03

#### **ACTIVITIES**

 Develop and carry out beach preservation projects to enhance, protect and preserve the recreational and

- storm protection values of Delaware's beaches and dune systems.
- Sustain the primary dune and beach system through a regulatory control program that keeps construction off of the dunes and beach.
- Improve coastal storm hazard preparedness and mitigation.
- Reduce natural hazard losses through cooperation with the Federal Emergency Management Agency and the Delaware Emergency Management Agency in state natural hazard mitigation programs.
- Provide technical assistance to local governments and homeowners to improve beach and dune management.
- Identify sufficient sand sources for beach nourishment work for a ten-year maintenance period.
- Provide assistance to property owners, elected officials at all levels, and the media in understanding the complex physical dynamics of beach erosion and storm impacts to aid in pre- and post-coastal storm impact reduction and recovery.
- Operate and maintain sand bypass facility at Indian River Inlet.
- Conduct repair and maintenance program of publicly owned coastal dunes.
- Improve and maintain navigational channels statewide.
- Restore the environmental integrity of state-owned lakes and ponds.
- Monitor erosion rates of beaches and dunes through a comprehensive surveying program.
- Mechanically harvest nuisance marine macroalgae in the Inland Bays to maintain water quality, aesthetics and boating access.
- Establish and maintain inland waterway navigational channels for the boating public.
- Cooperate with the federal government to initiate construction of a federal shore protection project at Dewey and Rehoboth Beaches.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
% response to			
legislative/constituent			
requests for marking			
navigable channels in Inland			
Bays	100	100	100
Width in feet of a dry sand			
Atlantic facing beach that is			
present for summer			
recreational use, seaward of			
dunes and structures	75-100	100	100
# of structures that suffer			
damage from storms to the			
parts of the structure that are			
essential to use for occupation			_
or enterprise	0	0	0
# of publicly accessible small			
boat navigation channels			
restored to authorized			
dimensions	1	2	2

## DISTRICT OPERATIONS 40-07-04

- Provide comprehensive Erosion and Sedimentation (E&S) and Stormwater Management Training to the land development community, in partnership with other agencies and members of the regulated community.
- Provide financial, technical and compliance assistance to delegated agencies for plan review and field inspection services on 6,000 acres of development and construction projects.
- Provide sediment and stormwater management field inspection on federal and state funded, non-Department of Transportation construction activities.
- Implement National Pollutant Discharge Elimination System (NPDES) Phase II requirements for stormwater management.
- Direct and administer Clean Water Act Section 319 grant funds for priority water quality assessment and implementation of best management projects.
- Provide technical assistance to other agencies, engineers and consultants, farmers and animal producers, contractors and developers, educators, college professors and university officials.
- Assist the Nutrient Management Commission with the development of Nutrient Management Regulations and implement nutrient management plans and BMPs through the work of eight

- conservation district planners in the Delaware Bay, Chesapeake Bay and Inland Bays watersheds.
- Provide staff support for DNREC's Total Maximum Daily Load effort by performing related assessment and implementation activities in the Piedmont, Chesapeake, Inland Bays and Delaware Bay Basins.
- Administer the Conservation Cost Share Program and agricultural component of the State Revolving Loan Fund Program in coordination with federal Farm Bill programs.
- Direct the state's efforts and funding for the U.S. Department of Agriculture (USDA) Conservation Reserve Enhancement Program (CREP).

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Reduction in # of tons of soil and sediment delivered to Delaware's waterways through the efforts of the Sediment and Stormwater Program			
compliance	500,000	375,000	375,000
Maintain 3% reduction nitrogen loadings in the Chesapeake, Delaware Bay and Inland Bays			
watersheds	6.1	3	3

## DELAWARE COASTAL MANAGEMENT 40-07-05

#### **ACTIVITIES**

- Administer National Oceanic and Atmospheric Administration's (NOAA's) grant awards to DNREC for coastal management and Delaware National Estuarine Research Reserve (DNERR).
- Provide grant funding to improve responsiveness to coastal management issues including coastal storm related damage reduction, near-coastal water pollution abatement, habitat improvement, oil pollution prevention and response, coastal access, and pollution prevention.
- Administer the federal consistency provisions of the Coastal Zone Management Act for Delaware.
- Team up with the Division of Air and Waste Management (DAWM) on a project to improve Brownfield redevelopment in Delaware Coastal Areas
- Implement an enhancement plan approved by NOAA for cumulative and secondary impact avoidance and coastal wetland protection.

- Implement educational programs for public, schools, resource users and decision-makers addressing coastal resource issues.
- Provide a small grants program to local governments to improve environmental management in their land use decision making process.
- Implement the National System Wide Monitoring Program for water quality, nutrients and biological parameters.
- Implement the Environmental Cooperative Science Center Program with Delaware State University.

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
# of public programs hosted			
by the DNREC	37	30	40
# of school children attending			
the DNERR education			
programs	3,687	4,000	4,000
# of meetings participants			
hosted by the DNERR			
conference facility	947	1,000	1,200

## WATER RESOURCES 40-08-00

#### MISSION

To protect and enhance the quality and quantity of Delaware's waters and wetlands.

#### KEY OBJECTIVES

- Ensure a safe, reliable water supply for New Castle County by providing technical and policy support to the Water Supply Coordinating Council.
- Implement, with the assistance of the coordinating council, water purveyors and local governments, the new "A List" of water supply projects in northern New Castle County.
- Prevent increases and strive to reduce nutrients, sediments, and toxic substances in the Piedmont Basin, Chesapeake Basin, Inland Bays Basin, and Delaware River Basin by 2005.
- Ensure that all ground waters and surface waters used for drinking water are protected by 2008 to meet the long-term goal of the Drinking Water Standards.
- By the year 2004, fully implement a no net loss policy for the unavoidable losses of wetlands and for the unavoidable physical alteration of streams by requiring mitigation in wetland and subaqueous land permits.
- Increase the percentage of waterways meeting water quality standards for swimming and aquatic life (formerly referred to as fishable and swimmable goals) at the levels reported in the 1998 Watershed Assessment Report.
- Support efforts of the Nutrient Management Commission.
- Develop and implement an on-site wastewater compliance inspection program in the Inland Bays watershed using funding from the Soil and Water Conservation's 319 and 6217 grants.
- Establish requirements to replace standard on-site wastewater systems with systems capable of enhanced nutrient removal in nutrient impaired watersheds.
- Support and implement the recommendations, if funding allows, of the Advisory Council on Cancer Control.
- Provide for the equitable and adequate allocation of safe and sound surface and ground water supplies.

- Increase by five percent the number of waterways meeting standards for fishable and swimmable by 2004, using the 2000 305(b) Report as a baseline.
- Reduce exposure to hazardous substances, including carcinogenic substances in the ambient environment.
- Improve the function and value of coastal and freshwater streams and wetlands for habitat, flood control and water quality enhancements.

#### BACKGROUND AND ACCOMPLISHMENTS

Water Resources recognizes that protecting and enhancing the quality and quantity of Delaware's waters and wetlands is best achieved through the cooperative efforts between the division and its constituents.

Water Resources fulfills its responsibilities by implementing its various regulatory programs; providing technical skills to programs; laboratory services; educational services; performing applied research; and helping finance water pollution control and drinking water projects.

The division continues to protect the interests of Delaware's residents by following its operating motto of "clean water today and tomorrow."

#### Accomplishments

- Assisted the Governor's Office on mitigation of the new drought of record experienced in 2002. As a result of these efforts, northern New Castle County had no disruptions in the interconnected water supply systems and less than 10 percent of emergency water storage in Hoopes Reservoir was required to meet demands.
- Expanded and administered water pollution control loans to communities, poultry and dairy farmers and underground tank owners through the State Revolving Loan Fund (SRF).
- Performed educational/outreach efforts with numerous agricultural groups on water management and water allocation permitting program.
- Coordinated with Water Resources Agency and Delaware Geological Survey to develop an updated waster supply plan for northern NCC.
- Assisted the Nutrient Management Commission and the Department of Agriculture by participating in commission meetings and fulfilling commitments established in the DDA-DNREC Memorandum of Understanding for Confined Animal Feeding

- Operation (CAFO) by assisting in the drafting of a draft General Permit for CAFOs.
- Expanded the Septic Loan Program to include matching grants for qualified homeowners with low to moderate incomes.
- Developed and implemented a compliance inspection program for small on-site wastewater systems located in the inland bays watershed
- Developed protocol for testing an Aquifer Storage and Recovery (ASR) well in New Castle County which will assist efforts to address future droughts.
- Developed e-government link to renew on-site wastewater licenses via the department's web.
- Continued department review of the U.S. Army Corps of Engineers' permit application to deepen the shipping channel in the Delaware River. The Corps conducted an economic reanalysis of the project after the publication of a report by the General Accounting Office critical of their methodology. Economists retained by the Department will review the reanalysis and submit findings to the Department's Hearing Officer.
- Prepared and submitted extensive comments to EPA regarding proposed federal regulations that would limit the protection of isolated wetlands and waters in Delaware.
- Secured funding from Natural Resources Conservation Service (NRCS) to cost share projects that utilize environmentally compatible techniques for stabilizing eroding shorelines.
- Provided technical and financial support during development of Total Maximum Daily Loads for Christine River, Delaware Estuary, and Murderkill River.
- Coordinated TMDL development via participation on the Piedmont, Chesapeake, Inland Bays and Delaware Bay Drainage Whole Basin Management teams.
- Assisted Tributary Action Teams in developing Pollution Control Strategies for the Inland Bays, Nanticoke River, Broad Creek, Murderkill River and Appoquinimink River Watersheds.
- Performed compliance inspections on wastewater holding tanks in the Inland Bays watershed.
- Reissued National Pollutant Discharge Elimination (NPDES) permits for Delaware City Power Plant, Formosa, Winterthur, SPI Pharma, and

- Uniqema/Avecia. Issued NPDES permits to Schiff Farms, Newark (MS4) and DelDOT-Kent County (MS4). Eliminated NPDES permits for FMC, Dupont Chestnut Run, Kuhne (Chloramone), Seawatch, Southwood Acres, and Shadybrook Farms.
- Worked with EPA, New Jersey, Pennsylvania, and New York to establish a Program Office and Director position for the Delaware Estuary Program.

	J	FUNDING	
	FY 2003 ACTUAL	FY 2004 BUDGET	FY 2005 GOV. REC.
GF	10,878.7	7,894.7	7,672.4
ASF	3,432.0	3,986.8	3,986.8
TOTAL	14,310.7	11,881.5	11,659.2

	1 OSITIONS			
	FY 2003 ACTUAL	FY 2004 BUDGET	FY 2005 GOV. REC.	
GF	74.3	68.0	68.0	
ASF	62.8	62.7	62.7	
NSF	29.9	29.3	29.3	
TOTAL	167.0	160.0	160.0	

POCITIONS

MANAGEMENT AND SUPPORT - WATER RESOURCES 40-08-01

- Improve the levels of technical support, education, and regulatory services to the citizens of the state to better protect the state's water resources.
- Support the Delaware Estuary Program and the Partnership for the Delaware Estuary by supporting implementation actions such as Total Maximum Daily Load (TMDL) development, combined sewer overflow (CSO) and storm drain signing, and wetland habitat assessment.
- Support the Center for the Inland Bays by assisting in implementation of the Inland Bays Comprehensive Conservation and Management Plan (CCMP).
- Provide technical support and strategic input to local governments that maintain projects that affect wetlands.
- Provide staff support to the Wastewater Facilities Advisory Council and provide wastewater engineering/financial planning assistance to three communities.

- Provide low-interest water pollution control loans to communities, homeowners, and agricultural producers.
- Provide technical support to Delaware Technical Community College for the development of an onsite wastewater training center.
- Actively assist the Delaware River Basin Commission and the Appalachian States Low-Level Radioactive Waste Commission by serving on the commission and supporting their various committees and sharing information.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
\$ low interest loans and grants for wastewater projects that enhance water quality or contribute to achieving	141000	20.000.0	27.000.0
TMDLs	14,189.0	30,000.0	25,000.0
\$ low interest loans for eligible nonpoint source expanded use			
activities	917.4	1,500.0	1,500.0

## ENVIRONMENTAL LABORATORY 40-08-02

#### **ACTIVITIES**

- Perform biological assessments and chemical analyses to ensure the wise management, conservation, and enhancement of the state's natural resources and protect public health and the environment. Analyses will support Total Maximum Daily Load (TMDL) and Water Quality Standards programs, State Superfund and Brownfields, site investigation and remediation, emergency response (fish kills, Pfiesteria and harmful algal surveillance, chemical spills), National Pollution Discharge Elimination System (NPDES), fish tissue testing for toxics in fish, air surveillance, and Shellfish and Recreation Waters Programs.
- Established a lab unit that will use genetic techniques in conjunction with the Watershed Assessment Section. These techniques will be used for DNA fingerprint identification of bacteria, protozoa and other organisms. When operational this unit will also be used for tracking source(s) of bacteria in support of the development and implementation of TMDLs, Pollution Control Strategies, permit allocations, and regulatory/enforcement actions.

- Install and operate the Laboratory Information Management System (LIMS) to enhance quality and productivity and to facilitate information sharing throughout the division and department.
- Provide educational initiatives for teachers and youth in schools, colleges, and universities and utilize skills of senior citizens through job shadowing, internships, mentoring, tours, and volunteer programs.
- Identify new market opportunities and anticipate and satisfy clients' changing needs by expanding laboratory analytical capabilities to incorporate the best available technology.

#### PERFORMANCE MEASURES

	FY 2003 Actual		FY 2005 Gov. Rec.
% improvement of laboratory			
testing cycle times by decreasing			
average turnaround time per test	4.0	3.0	3.0

## SURFACE WATER DISCHARGES 40-08-04

- Equalize annual permit production and align permit issuance on a watershed basis to eliminate permit backlog by Fiscal Year 2005.
- Use National Pollutant Discharge Elimination System (NPDES) permits to implement Pollution Control Strategies for Total Maximum Daily Loads.
- Issue NPDES permits that contain the necessary requirements and conditions (i.e., toxic controls, pretreatment requirements, stormwater, CSO, sludge requirements, etc.).
- Issue licenses for wastewater treatment operators, and review plans and issue permits for construction of wastewater collection and treatment facilities.
- Conduct compliance inspections for NPDES facilities and CSO systems.
- Work with the City of Wilmington and EPA in implementing their CSO Control Plan.
- Periodically review and update program regulations for point source dischargers.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Decrease in number of NPDES			
permit violations (%)	*+5	10	10
Quantity (gal.) of Wilmington			
combined sewer overflows	N/A	**	**

\*FY 2003 recognized 5% increase in permit violations.

## GROUND WATER DISCHARGES 40-08-05

#### **ACTIVITIES**

- Encourage designers/applicants to incorporate land treatment systems into their wastewater management plans.
- Perform construction and compliance inspections on 100 percent of all large on-site wastewater systems and 75 percent of all small systems.
- Issue large septic permits and spray permits in compliance with all applicable regulations.
- Issue replacement/repair permits for all known malfunctioning subsurface systems.
- Issue Underground Injection Control (UIC) permits/authorizations in compliance with all applicable regulations.
- Locate and inventory all unauthorized UIC wells, perform inspections and prevent non-compliance.
- Perform compliance inspections of holding tanks in the Inland Bays of Sussex County.
- Perform compliance inspections of small individual on-site wastewater systems in the Inland Bays Watershed.
- Provide technical support to Delaware Technical Community College for the development of an onsite wastewater training center.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
% of construction			
inspections on on-site			
wastewater systems that			
discharge less than 2,500			
gallons per day	70	50	70
% alternative on-site			
treatment systems			
inspected for operational			
compliance	20	33	33
% of construction			
inspections on on-site			
wastewater systems that			
discharge more than 2,500			
gallons per day	100	100	100
% of compliance			
inspections on on-site			
wastewater systems that			
discharge more than 2,500			
gallons per day	100	100	100
% of compliance			
inspections on Holding			
Tanks in the Inland Bays			
Watershed	98	100	100
# of compliance			
inspections of small			
individual on-site waste			
waster systems in the			
Inland Bays Watershed			
initiated by the 319 and			
6217 Federal Grant*	130	150	170

## *WATER SUPPLY* **40-08-06**

- Assist in the Governor's mandate to ensure a safe, reliable water supply for New Castle County by providing technical and policy support to the Water Supply Coordinating Council.
- Review and approve allocation permits for public and environmental protection and water well permits for public and environmental protection.
- Conduct research and monitoring of ground water resources.
- Provide assistance to New Castle County for requirements of New Castle County Water Resource Protection Area Ordinance.
- Implement the Source Water Assessment and Protection Program under the federal 1996 Safe Drinking Water Act Amendments (joint cooperation with the Department of Health and Social Services and the Public Service Commission) including long-

<sup>\*\*</sup>FY 2004 will establish benchmark data for new performance measures.

- term protection strategies for public drinking water supply sources.
- Promote water conservation, wellhead protection and source water protection via public education and cooperative agreements with stakeholders.
- Perform ground water reviews for non-hazardous waste sites.
- Assist the Department OIT with the conversion of the water database to the Environmental Navigator.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
% 1-day turnaround time			
for domestic well			
applications	90	90	90
# water allocation permits			
issued to reduce backlog of			
un-permitted projects	28	30	30
% 2-day turnaround			
provided for drinking water			
wells located near			
contaminated sites	90	90	90
% well permit data entered			
within 5 days of receipt of			
information	85	90	95

## WATERSHED ASSESSMENT 40-08-07

#### **ACTIVITIES**

- Monitor and assess shellfish harvesting area water quality and inspect shellfish distribution and processing facilities in compliance with National Shellfish Sanitation Program (NSSP) specifications.
- Implement the federal Beaches Environmental Assessment and Coastal Health Act by monitoring guarded beaches and issuing advisories when unacceptable water quality conditions exist.
- Develop and implement Pollution Control Strategies (PCSs) to meet pollutant load reduction goals established by TMDLs for the Inland Bays, Nanticoke River, Broad Creek, Appoquinimink River, and the Murderkill River Watersheds.
- Develop wetland profiles to quantify and qualify their water quality and habitat functions in the Nanticoke River Watershed. These profiles will be transferable to other watersheds to assist in future wetland restoration, siting and development.
- Implement management actions that will protect the public from hazardous algae bloom related events.

- Cooperate with Delaware River Basin Commission, Pennsylvania and New Jersey in developing a Delaware Estuary TMDL by the end of 2003.
- Begin development of bacteria TMDL's using new genetic techniques.

#### PERFORMANCE MEASURES

T EITH OTHER (OE TIER OTHER				
	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.	
	Actual	Duuget	Gov. Rec.	
% waters attaining water quality				
standards for healthy aquatic life	36	36	36	
Acres of watersheds with nutrient				
TMDLs in place	628,860	658,895	668,121	
Acres of watersheds with				
Pollution Control Strategies in				
place	0	206,433	528,311	
1	U	200,433	320,311	
Enhance swimmer protection at				
natural bathing beaches and				
maintain incidence of water-				
borne disease at no greater than				
current levels (# illnesses)	<10	<10	<10	
# of incidences of water borne				
disease (swimmer illness)	0	<10	<10	

## WETLANDS AND SUBAQUEOUS LANDS 40-08-08

#### **ACTIVITIES**

- Maintain an inventory of tidal wetlands, issue wetland permits, and issue subaqueous lands permits and leases.
- Review and issue marina construction permits.
- Issue Water Quality Certifications for federal permits.
- Promote stream channel and riparian restoration.
- Support efforts to reestablish fees for docks and piers on public subaqueous lands.

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
% of shoreline stabilized with soil bioengineering and rip-rap			
vs. bulkheading	30	30	40
% of marinas with approved operations and maintenance			
plans	20	20	20

## AIR AND WASTE MANAGEMENT 40-09-00

#### MISSION

To optimize the air resources and waste management practices within Delaware by working cooperatively with the citizens and businesses of Delaware to protect public health, welfare and the environment.

#### **KEY OBJECTIVES**

- Reduce exposure to hazardous substances, including carcinogenic substances, in the ambient environment.
- Attain one-hour ozone standard by 2005 in New Castle and Kent counties.
- Prevent exceedences of air quality standards for particulate matter, sulfur dioxide, carbon monoxide and nitrogen dioxide, and reduce hazardous air pollutants by adopting EPA's "National Emission Standards for Hazardous Air Pollutants for Source Categories."
- Maintain an air quality network, which provides reliable and accurate data for ambient concentrations of ozone, particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides.
- Promote greater re-utilization of brownfields through development of a Brownfield inventory and redesign the brownfields regulatory process for greater ease of re-vitalization.
- Increase residential solid waste recycling to 30 percent by 12/2005.
- Provide timely and appropriate response on a 24hour basis to citizen complaints and environmental emergencies and enforce compliance for other Health and Safety Objectives.

#### BACKGROUND AND ACCOMPLISHMENTS

**Enforcement** - The Air and Waste Management Enforcement Section is responsible for responding to and investigating environmental emergencies and citizens' complaints on a 24-hour basis. The section focuses its efforts on the criminal enforcement of federal, state, and department laws and regulations. Air and Waste Management Enforcement Officers provide investigative and prosecutorial services to three of the

five divisions within DNREC including Air and Waste Management, Water Resources, and Soil and Water Conservation. The Air and Waste Management Enforcement Section also operates the DNREC industrial notification system, and the Delaware Release Environmental Notification System. Additionally, the section has trained all personnel as Hazardous Materials Technicians, who respond to environmental releases for the purpose of stabilizing and investigating the incidents. In Fiscal Year 2003, section activities included providing professional response services to the community, the coordination of drought enforcement services, pro active operations targeting waste management, water quality, and air pollution issues, public and professional outreach programs designed enhance environmental awareness, identification of community environmental issues, maintaining training in both environmental response and law enforcement, enhancements to the public notification system, and initiating cost saving measures.

Air Quality Management - Since the passage of the 1990 Clean Air Act Amendments, the department has made unprecedented progress in its efforts toward providing clean air to all its citizens. During 2003 the Air Quality Management (AQM) Section, in conjunction with EPA Region III, embarked on the full implementation of the Delaware Air Toxics Assessment DATAS is a two-year project Study (DATAS). established to quantify actual, monitored emissions of hazardous air pollutants in relation to modeled projections. Multiple monitoring sites are operating throughout the state, using existing monitoring resources. Air Quality Management has continued to move forward with our Title V Operating Permit Program that includes issuance of required permits, developing a Compliance Assurance Program, and has begun completing Title V Permit Renewals. To facilitate permit issuance, a permit tracking system is being developed that will improve issuance efficiency thus reducing any permitting backlog. In conjunction with this tracking system, a computer based "Desk Reference" is being designed to further increase staff efficiency with permitting, compliance and enforcement activities. The Small Business Technical Assistance Program continues to provide technical advice and assistance to small businesses to aid them in complying with regulations. Delaware continuously monitored the concentrations of sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter and ozone at nine stations statewide, and made the data available on a near realtime basis on the AOM website.

Waste Management- Site Investigation and Restoration - With the passage of the Delaware HSCA

in 1990, the branch has assumed a major role in investigating and cleaning up non-NPL sites which pose a threat to public health, welfare and the environment. In 1993, the branch initiated the Voluntary Cleanup Program (VCP) under which a party can come forward and remediate a contaminated site and make it available for reuse. This program was formalized through amendments to HSCA in July 1995. The branch has investigation and cleanup ongoing VCP/Brownfield sites. One hundred twelve sites are currently undergoing cleanup, and 69 sites have been cleaned up for reuse. Further, in 2002 (Fiscal Year 2003), the branch with cooperation from the Division of Public Health completed a study to monitor possible movement of contamination from hazardous waste sites to public drinking water systems. The branch will continue to implement the recommended action of this study in Fiscal Year 2005.

Brownfield Revitalization - A major component of revitalization and VCP success is DNREC's Brownfield Initiative. Brownfield redevelopment seeks to direct future development to targeted growth areas where new services and needs that can be provided at the least cost while simultaneously cleaning up the environment. Within the next 6 months, DNREC will work with DEDO to improve and streamline the Brownfield process. This will be a cooperative effort that will involve partnering with both private and public agencies to create greater opportunities for redevelopment as well as address the clean up of suspected contamination at these properties.

Tank Management - Delaware's Underground Storage Tank (UST) Program regulates petroleum and hazardous substance tanks through their life cycle. The program has two main goals. One is to identify and clean up leaks that have occurred. The second goal is to prevent future leaks that could lead to contamination of Delaware's water supplies or the accumulation of explosive vapors in residences, businesses or utility conduits. A program milestone was achieved on September 27, 1996, when Delaware's UST program received program delegation from EPA Region III. Delaware's UST program is now authorized to operate in lieu of the federal UST program. In 1997 the UST program in coordination with the Delaware Economic Development Office and the State Revolving Fund announced a new loan program for UST The program named PLUS assists owners with upgrading, removing and remediating UST sites. Another milestone was reached on December 22, 1998, when the final upgrade deadline for active underground storage tank systems passed. As of this date, all tanks must meet the corrosion protection standards as well as leak detection, spill and overfill protection requirements.

Delaware's Aboveground Storage Tank program was created when the Aboveground Storage Tank (AST) Act was signed into law on July 8, 2002. The Act requires the department to develop regulations for the installation, operation, maintenance, leak detection and corrective action for ASTs. This process must be completed by July 8, 2004. In an effort to develop a set of regulations with public participation, an advisory committee has been formed to assist the department. In addition, AST owners were required to register their tanks by September 6, 2002. To date, 735 facilities registered over 3,100 ASTs. The information collected is being entered into a database to provide information and to be the basis for billing facilities for their fees. The information has been used in the development of the regulations and environmental responses.

In Fiscal Year 2005, Boiler Safety will be incorporated into the Tank Management Branch. Boiler Safety is comprised of inspectors holding commissions issued by the National Board of Boiler and Pressure Vessel Inspectors. The purpose of the program is to promote increased safety for life and property by maintaining uniformity in the construction, installation, inspection and repair of boilers and pressure vessels. This assures acceptance among jurisdictional authorities responsible for the administration and enforcement of the various sections of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The program is responsible for inspection and oversight of insurance company inspections of boilers and pressure vessels in places of public assembly.

Solid and Hazardous Waste Management - The Solid and Hazardous Waste Management program is responsible for ensuring Delaware's wastes are managed in a manner that is protective of human health and the environment. The program ensures proper management through a permitting and compliance monitoring program and also through encouragement of waste reduction, waste re-use and waste recycling activities. In the past year, the Solid and Hazardous Waste programs effectively monitored and when necessary, amended permits for existing landfills, transfer stations, and waste storage and treatment operations at a variety of Delaware businesses. The recycling program continued to work with the Recycling Public Advisory Council (RPAC). The branch implemented the recycling grant assistance program and assisted the RPAC in completion of an annual report that reflects what needs to occur in order for Delaware to increase its residential solid waste diversion rate.

**Emergency Prevention and Response -** This section is proposed for creation in FY 2005. It will combine the

division's current Environmental Response Branch, Emergency Planning and Community Right-to-Know (EPCR) group, and the Accidental Release Program (ARP) group. The Environmental Response Branch (ERB) staff provides a comprehensive response to timecritical emergency and non-emergency environmental incidents around-the-clock for the protection of human life, health, safety and the environment. Fiscal Year 2003, the Emergency Response staff responded to 382 incidents; 60 percent of the total number of incidents occurred in New Castle County, 60 percent of the total number of incidents involved no other state emergency response agencies but DNREC, and 60 percent of the total number of incidents was The EPCR continued to provide petroleum-related. support to the SERC State Emergency Response Commission and the Local Emergency Planning Committees. The ARP conducted inspections on companies with extremely hazardous substances to ensure proper control plans and operations to prevent disasters. The ARP also assisted with planning at the Metachem facility as part of the removal action.

	]	Funding	
	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	4,150.1	4,120.7	4,482.9
ASF	11,607.4	16,673.9	16,764.2
TOTAL	15,757.5	20,794.6	21,247.1
	P	OSITIONS	
	FY 2003	FY 2004	FY 2005
	ACTUAL	BUDGET	GOV. REC.
GF	54.5	53.3	58.3
ASF	95.8	94.7	94.7
NSF	58.7	57.0	57.0
TOTAL	209.0	205.0	210.0

MANAGEMENT AND SUPPORT - AIR AND WASTE 40-09-01

#### **ACTIVITIES**

- Implement the new chronic violator regulations in cooperation with other DNREC divisions.
- Promote the use of community advisory panels, environmental stewardship awards, Environmental Management System incentives, and International Organization for Standardization Certification to improve industry performance.
- Enforce federal, state, and DNREC laws and regulations for Air and Waste Management, Water Resources and Soil and Water Conservation.

- Investigate citizens' complaints and environmental incidents/emergencies on a 24-hour basis.
- Participate with federal, state and local emergency responders and planning agencies.
- Conduct background investigations on corporations and individuals seeking environmental permits.
- Oversee the response to Freedom of Information Act (FOIA) requests received by the division.
- Maintain a database of complaint and incident arrest history received from the DNREC 24-hour complaint line.
- Provide environmental enforcement training to other police agencies within the state.
- Utilize wireless computer technology to improve emergency response capabilities, and expedite public notification of incidents via the DNREC webpage.
- Maintain and develop policies, practices and procedures to prevent responder injury and govern enforcement and response activities.
- Continue community policing programs and public outreach activities.
- Improve ability to respond to suspected acts of terrorism by acquiring training and equipment.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
# of environmental release notification to the public	394	N/A	300
# of emergency responses to incidents	382	400	400
# of notifications to dept. of spills etc.	394	500	300
# of complaints	6,065	6,500	6,500

## AIR QUALITY MANAGEMENT 40-09-02

- Participate actively in Ozone Transport Commission (OTC), State and Territorial Air Pollution Control Administrators (STAPPA), and Mid-Atlantic Regional Air Management Association (MARAMA) activities to take advantage of combined expertise and foster regional and national strategies.
- Direct the State Implementation Plan (SIP) revisions as required by the Clean Air Act Amendments (CAAA) of 1990.
- Promulgate new air regulations required by the CAAA, the OTC and state needs and develop and

submit emission inventories consistent with the CAAA.

- Oversee existing motor vehicle exhaust emission pressure and anti-tampering tests.
- Track air quality status, especially ozone attainment status, and implement monitoring program for fine particulate matter.
- Continue effective compliance inspections and continue permitting air contaminant sources pursuant to the new and more complex Title V permitting program.
- Continue implementation of the Emergency Planning and Community Right-to-Know Program components.
- Continue implementation of Air Quality Management's portion of the Small Business Technical Assistance Program (SBTAP), that is, providing technical assistance to the Ombudsman as requested, and reviewing reports and progress made by the Ombudsman in accomplishing the overall goals of the SBTAP.
- Work with other public and private entities to develop or implement transportation and voluntary control programs such as Ozone Action Day.
- Initiate planning and implementation efforts to address longer term ozone, fine particulates and regional haze problems.
- Continue air toxics monitoring at the Wilmington air monitoring site, which commenced in 2000.
- Continue to implement audit procedures for the Inspection and Maintenance Program Two Speed Idle Test and On-Board Diagnostics (OBD) Tests, and evaluate data.
- Develop and implement audit procedures for the voluntary inspection and maintenance at the high-tech, special purpose inspection lane located at the Wilmington motor vehicle inspection lanes.

#### PERFORMANCE MEASURES

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
# of exceedences of Ozone,			
PM, CO, NO2 and SO2			
standards	N/A	N/A	*
# of ambient air samples			
collected	N/A	N/A	*
# of air samples for DATAS	N/A	N/A	*

<sup>\*</sup> FY 2005 will establish benchmark data for new performance measures.

## WASTE MANAGEMENT 40-09-03

#### **ACTIVITIES**

#### **Site Investigation and Restoration**

- Identify sites and prioritize using the Delaware Hazard Ranking Model.
- Oversee Remedial Investigation, Feasibility Study, Remedial Design and Remedial Action at HSCA sites.
- Review applications of volunteers for acceptance into the Voluntary Cleanup Program (VCP).
- Provide oversight for the investigation, study, design and clean up of VCP sites consistent with HSCA.
- Assist the volunteers in obtaining grants, loans and tax credits at Brownfield sites so that such sites can be put to productive use.
- Promote field screening procedures to reduce the number of analytical samples sent to the laboratory for full analysis.
- Work with communities so they better understand the SIRB programs and the risks posed by SIRB sites.
- Perform eight Brownfield preliminary assessments/site inspections at sites targeted for redevelopment during Fiscal Year 2004.
- Develop and implement a ranking system for Brownfields that would address redevelopment potential and the degree of contamination.
- Continue to screen shallow public drinking water supplies for contaminants as recommended by Delaware's task force on cancer incidence and mortality.

#### **Tank Management**

- Identify unregistered Underground Storage Tanks (USTs); and conduct UST facility, UST removal or abandonment, and new UST installation compliance inspections.
- Identify unreported releases from USTs.
- Reduce the amount of time from identification to closure of Leaking Underground Storage Tanks (LUST) sites.
- Continue implementation of risk based corrective action closure procedures at LUST sites.
- Reach 100 percent compliance with the 1998 deadline requirements for all regulated petroleum underground storage tanks through enforcement.
- Continue permitting and enforcement of Stage II requirements in Sussex County.
- Implement the Aboveground Storage Tank Program for the State.

- Maintain data on nearly 21,000 boilers and pressure vessels.
- Inspect approximately 3,500 objects.
- Commission private insurance inspectors operating within Delaware and monitor approximately 17,500 inspections performed by them.
- Investigate boiler and pressure vessel accidents.
- Conduct safety-training seminars on boiler and pressure vessel operation, maintenance and repair.
- Review 22-25 manufacturers and repair companies of boiler and pressure vessels.

#### Solid and Hazardous Waste Management

- Regulate the disposal of waste generated in Delaware to prevent any significant adverse impacts to Delawareans or Delaware's environment.
- Monitor permitted solid and hazardous waste sites to identify any contaminant releases to the environment.
- Require, oversee and approve corrective actions to remedy any significant adverse impacts resulting from contaminant releases.
- Pursue closure and remediation of unauthorized, illegal or environmentally unacceptable solid and hazardous waste disposal sites.
- Track the transport and disposal of solid and hazardous waste to ensure compliance with environmental regulations.
- Communicate and encourage targeted hazardous waste generators on the reduction of hazardous waste and complete solid and hazardous waste compliance assessments and permitting while implementing a multi-media approach where possible.
- Implement the hazardous waste corrective action process.
- Work with Water Resources on best management practices for salvage yards.

#### PERFORMANCE MEASURES

1 ERFORMANCE WEASURES			
	FY 2003	FY 2004	FY 2005
	Actual	Budget	Gov. Rec.
# of leaking storage tanks	N/A	N/A	*
% reduction of Persistent			
Bioaccumulative Toxics over			
1991 generation rates	N/A	N/A	*
Develop a Brownfield			
inventory database by 12/04	N/A	N/A	*
% of Brownfields projects that			
meet or exceed negotiated			
project deadlines	N/A	N/A	*
% of residential solid waste			
recycled	N/A	N/A	*
# of boiler safety seminars:			
Contractor Training	3	3	3
School Training	10	19	19
# of overdue inspections	470	50	50

\*FY 2005 will establish benchmark data for new performance measures.

## EMERGENCY PREVENTION AND RESPONSE 40-09-04

#### **ACTIVITIES**

- Increase compliance assistance and inspections of facilities or regulated parties that have been identified as facilities of interest per the Metachem Task Force recommendations.
- Investigate citizens' complaints and environmental incidents/emergencies on a 24-hour basis.
- Participate with federal, state and local emergency responders and planning agencies.
- Upgrade response capabilities and coordinate and plan response activities through the State Emergency Response Commission (SERC).
- Improve ability to respond to suspected acts of terrorism by acquiring training and equipment.
- Continue implementation of the Emergency Planning and Community Right-to-Know Program components.
- Continue effective compliance inspections pursuant to the Extremely Hazardous Substances Regulation.

	FY 2003 Actual	FY 2004 Budget	FY 2005 Gov. Rec.
Number of emergency responses			
to incidents	382	400	400